

ABSTRACT

- 5 Described herein are nanoreactors having various shapes that can be produced by a simple chemical process. The nanoreactors described herein may have a shell as thin as 0.5 nm and outside diameters that can be controlled by the process of making and have a nanoparticle enclosed therein. The nanoreactors have catalytic activity and may be used to catalyze a variety of chemical reactions.